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UNITED STATES NAVAL OBSERVATORY

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POSITIONS, AREAS, AND COUNTS OF SUNSPOTS

MARCH, 1956

By Winifred Sawtell Cameron

These results are based upon measurements made at the Naval Observatory on plates secured either there or at the Mt. Wilson Observatory. The symbols used for the entries in the successive columns are as follows:

U.T., the epoch of observation in Universal Time.
No., the identifying number of the group assigned by Mt. Wilson.
Δl, the heliographic difference in longitude from the central meridian, measured positive to the west.
φ, the heliographic latitude, measured positive to the north.
ρ, the heliocentric angular distance from the line joining the centers of the Earth and Sun.
A, the true area of the umbra plus penumbra, expressed in millionths of the visible hemisphere.
s, the number of spots.

An asterisk means that no Mt. Wilson number was assigned. Plates secured at the Naval Observatory are indicated by N, and those at Mt. Wilson by M. The plate quality, which follows, is indicated by:

1, Poor; 2, Fair; 3, Good; 4, Very Good; 5, Excellent.

The following five quantities are listed successively at the end of each day, and give for that day:

1. The total number of groups, g.
2. The longitude of the central meridian, L_0.
3. The latitude of the center of the disc, B_0.
4. The total value of A.
5. The total value of s.

The mean daily area and the mean relative sunspot number, $r=10g+s$ are given at the end of the month.

These results are a continuation of those published in the *Monthly Weather Review* from February 1, 1927 to December 31, 1947.

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U.T.	No.	Δλ	φ	ρ	A	s
		°	°	°		
1.581	11493	−49	−26	52	194	2
N−2	11493	−46	−24	47	291	3
	11493	−45	−23	46	48	1
	11493	−43	−24	45	73	2
	11493	−41	−23	43	145	1
	11493	−40	−24	43	97	1
	11493	−39	−24	42	170	2
	11493	−36	−24	39	412	1
	11492	−39	+24	50	48	1
	11492	−37	+24	48	97	1
	11492	−36	+25	47	12	1
	11492	−31	+23	43	73	3
	11492	−30	+23	43	16	2
	11492	−28	+23	42	73	1
	11489	−25	−16	26	12	1
	11489	−20	−17	23	121	1
	11487	0	+24	32	16	1
	11487	+ 5	+22	29	36	1
	11491	+21	−26	27	61	1
	11495	+50	+20	56	145	1
	11495	+52	+17	56	32	2
	11495	+55	+20	60	121	1
	11495	+56	+16	60	48	1
	11495	+58	+17	62	61	2
	11495	+61	+17	65	218	2
	11480	+68	+25	74	145	2
	11480	+70	+27	76	485	1
	(7)	(8)	(−7)		3250	39
2.696	11497	−56	+31	65	48	2
N−3	11493	−35	−25	38	145	1
	11493	−33	−24	36	194	7
	11493	−30	−24	34	73	4
	11493	−29	−23	33	61	2
	11493	−28	−24	33	61	1
	11493	−27	−24	32	48	1
	11493	−26	−22	29	12	1
	11493	−25	−24	29	73	3
	11493	−24	−23	28	145	5
	11493	−20	−24	26	412	2
	11492	−23	+25	39	121	2
	11492	−18	+25	36	16	1
	11492	−15	+23	34	24	2
	11492	−14	+24	34	32	2
	11492	−12	+25	34	32	1
	11489	−13	−16	16	6	1
	11489	− 5	−16	11	145	1
	11487	+16	+24	35	16	2
	11487	+23	+23	37	16	1
	11491	+35	−26	38	24	1
	11495	+65	+20	69	24	1
	11495	+65	+18	69	73	1
	11495	+69	+17	72	36	2
	11495	+75	+17	78	97	2
	11495	+78	+16	80	170	1
	11480	+80	+24	85	145	1
	(8)	(353)	(−7)		2249	51
3.722	11496	−42	+31	55	16	1
N−1	11493	−21	−25	26	121	1
	11493	−18	−24	25	291	2
	11493	−16	−23	24	24	1
	11493	−15	−23	23	16	1
	11493	−11	−24	21	97	2
	11493	−11	−23	19	12	1
	11493	− 9	−24	20	48	1
	11493	− 7	−24	19	97	3
	11493	− 5	−24	18	461	1
	11499	−20	+20	34	73	1
	11499	−17	+18	31	24	1
	11492	− 8	+25	34	97	1
	11492	− 5	+25	33	194	2
	11492	− 1	+25	33	12	2
	11492	0	+24	32	36	1
	11492	+ 1	+24	32	73	1
	11492	+ 4	+25	33	97	1
	11489	+ 1	−16	10	12	1
	11489	+ 8	−16	13	121	1
	11487	+32	+21	42	48	1
	11498	+35	+21	44	48	1
	11498	+36	+23	46	48	1
	(7)	(340)	(−7)		2066	29
4.610	11501	−82	+32	85	339	1
N−1	11496	−31	+30	47	24	1
	11496	−28	+31	46	48	1
	11499	− 9	+20	29	73	1
	11499	− 5	+16	24	61	2
	11493	− 8	−25	21	61	1
	11493	− 6	−25	20	32	1
	11493	− 6	−24	19	194	2
	11493	− 4	−23	17	97	2
	11493	+ 1	−24	18	32	1
	11493	+ 4	−24	19	145	3
	11493	+ 6	−24	19	461	2
	11492	+ 4	+24	32	24	1
	11492	+ 4	+26	34	24	1
	11492	+ 5	+25	33	73	1
	11492	+ 6	+25	34	145	1
	11492	+10	+24	34	48	1
	11492	+11	+24	34	24	1
	11492	+14	+25	35	73	1
	11489	+20	−16	22	145	1
	11498	+43	+22	50	61	1
	11498	+47	+22	54	24	1
	(7)	(328)	(−7)		2208	28
5.578	11501	−60	+32	68	194	2
N−2	11499	+ 3	+21	27	61	1
	11499	+ 6	+18	26	24	1
	11499	+ 8	+17	26	97	1
	11493	+ 4	−24	18	36	3
	11493	+ 6	−23	17	339	4
	11493	+ 7	−22	16	16	2
	11493	+ 9	−23	18	32	1
	11493	+13	−23	21	32	2
	11493	+14	−24	22	32	2
	11493	+18	−24	25	582	3
	11492	+14	+25	35	12	1
	11492	+15	+24	34	32	2

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U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
	11492	+16	+25	36	242	3
	11492	+20	+24	37	24	1
	11492	+23	+25	39	48	4
	11492	+26	+26	41	267	3
	11489	+33	−15	34	109	2
	11498	+55	+24	61	32	1
	11498	+60	+23	66	16	1
	(6)	(315)	(−7)		2227	40
6.613	11501	−56	+32	66	145	1
N−1	11501	−50	+32	61	97	1
	11501	−46	+33	59	194	1
	11499	+15	+21	32	61	1
	11499	+16	+20	32	48	1
	11499	+18	+20	33	36	1
	11499	+24	+17	34	133	1
	11493	+18	−23	24	145	1
	11493	+20	−23	25	73	1
	11493	+32	−24	35	533	1
	11492	+29	+25	44	436	1
	11492	+33	+26	46	48	1
	11492	+36	+24	46	97	2
	11492	+41	+26	52	388	1
	11489	+46	−15	46	121	1
	(5)	(302)	(−7)		2555	16
7.634	11501	−50	+34	63	24	1
N−1	11501	−46	+33	59	73	1
	11501	−44	+32	57	73	1
	11501	−37	+33	53	97	1
	11501	−35	+34	53	194	1
	11502	−12	−17	16	48	1
	11502	− 6	−17	13	109	3
	11499	+29	+22	41	73	1
	11499	+38	+18	45	121	1
	11493	+31	−22	34	97	1
	11493	+44	−23	45	606	1
	11492	+41	+26	52	267	1
	11492	+42	+27	54	194	2
	11492	+50	+26	59	97	1
	11492	+54	+27	62	339	1
	11489	+59	−15	59	145	1
	(6)	(288)	(−7)		2557	19
8.813	11501	−35	+36	54	24	1
N−2	11501	−31	+36	52	218	3
	11501	−30	+37	53	24	1
	11501	−23	+33	46	32	1
	11501	−21	+34	46	36	1
	11501	−20	+35	46	48	1
	11501	−17	+35	45	194	3
	11504	−33	+27	46	32	1
	11502	+ 3	−16	10	32	1
	11502	+ 6	−16	12	24	1
	11502	+12	−16	15	109	1
	11499	+44	+22	52	32	1
	11499	+46	+21	53	61	1
	11499	+50	+18	56	61	1
	11499	+55	+17	60	194	1
	11493	+46	−22	47	61	2
	11493	+59	−24	60	509	4
	11492	+59	+24	65	97	1
	11492	+59	+26	66	291	1
	11492	+70	+26	76	436	3
	11489	+76	−16	77	170	2
	(7)	(273)	(−7)		2685	32
9.547	11504	−27	+25	43	6	1
N−2	11504	−23	+26	40	61	4
	11501	−26	+36	50	16	1
	11501	−24	+35	48	170	6
	11501	−22	+36	47	24	1
	11501	−14	+33	43	32	2
	11501	−13	+32	41	32	1
	11501	−12	+33	41	24	2
	11501	− 9	+34	43	242	1
	11502	+14	−16	16	16	1
	11502	+17	−16	20	24	1
	11502	+23	−16	24	194	1
	11499	+54	+23	60	24	1
	11499	+55	+23	61	97	2
	11499	+59	+20	64	48	1
	11499	+64	+19	68	170	3
	11493	+56	−20	57	36	3
	11493	+69	−21	70	582	1
	11492	+67	+28	73	194	2
	11492	+68	+26	73	48	1
	11492	+70	+27	76	48	1
	11492	+80	+27	86	194	1
	(6)	(263)	(−7)		2282	38
10.665	11506	−66	−19	65	194	3
N−1	11504	−12	+26	35	73	2
	11504	− 6	+26	34	121	3
	11501	− 9	+35	44	109	1
	11501	− 7	+34	42	121	2
	11501	− 5	+33	41	32	1
	11501	+ 4	+34	42	16	2
	11501	+ 6	+34	43	267	1
	11502	+36	−16	37	194	1
	11493	+85	−23	84	727	1
	(5)	(248)	(−7)		1854	17
11.801	11508	−75	+23	79	679	1
N−1	11508	−71	+24	75	242	1
	11508	−70	+22	75	242	1
	11509	−74	−22	72	485	1
	11511	−73	+20	76	388	1
	11506	−49	−18	49	73	1
	11504	+ 3	+26	34	121	1
	11504	+ 8	+25	34	73	1
	11501	+ 5	+36	44	48	1
	11501	+ 6	+35	44	73	1
	11501	+21	+35	45	242	1
	11502	+53	−16	53	194	1
	(7)	(233)	(−7)		2860	12

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U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
12.727	11508	−62	+25	67	339	3
M−2	11508	−61	+23	66	242	2
	11508	−60	+25	66	12	1
	11508	−59	+24	65	170	3
	11508	−59	+26	66	109	2
	11508	−57	+24	64	24	1
	11508	−56	+23	62	73	3
	11508	−51	+23	57	24	1
	11511	−61	+21	65	291	1
	11509	−61	−21	62	436	1
	11506	−36	−17	37	24	1
	11510	−32	+44	58	24	2
	(*)	−27	+20	38	12	1
	(*)	−19	+22	35	12	1
	11512	+15	+38	47	36	1
	11512	+17	+37	46	16	3
	11504	+18	+27	40	12	2
	11504	+21	+26	38	12	2
	11501	+33	+36	53	145	1
	11502	+64	−17	63	194	1
	(11)	(221)	(−7)		2207	33
13.711	11517	−80	+24	85	194	1
M−2	11516	−79	−21	78	242	1
	11508	−49	+23	56	339	3
	11508	−48	+26	57	194	1
	11508	−46	+23	54	388	5
	11508	−46	+26	56	97	1
	11508	−44	+24	53	73	1
	11508	−42	+22	50	32	3
	11508	−41	+21	48	121	3
	11508	−37	+22	46	16	2
	11515	−48	+18	54	61	1
	11515	−44	+16	49	73	2
	11515	−44	+17	50	24	2
	11511	−47	+21	54	291	1
	11509	−47	−21	48	485	1
	11506	−24	−18	26	16	1
	11513	+ 2	+17	25	6	1
	11513	+ 4	+17	25	12	1
	11504	+32	+26	45	12	1
	11501	+45	+34	59	170	1
	11502	+77	−17	76	170	1
	(11)	(208)	(−7)		3016	34
14.881	11516	−65	−18	64	315	1
N−2	11517	−63	+26	69	97	1
	11508	−34	+25	46	121	1
	11508	−33	+26	46	242	3
	11508	−31	+24	44	485	6
	11508	−26	+22	39	24	1
	11508	−24	+22	37	109	2
	11509	−34	−19	36	461	1
	11511	−33	+22	44	291	2
	11515	−33	+19	43	145	3
	11515	−31	+19	40	16	1
	11515	−30	+18	39	73	3
	11515	−27	+17	36	145	2
	11514	− 5	+18	26	121	3
	11504	+45	+27	55	48	2
	11501	+61	+34	70	194	2
	(9)	(193)	(−7)		2887	34
15.717	11520	−66	+19	70	145	1
M−1	11520	−61	+18	65	97	1
	11517	−54	+24	61	16	1
	11517	−51	+25	58	97	1
	11516	−52	−21	52	339	2
	11519	−49	−25	51	16	1
	11509	−24	−23	28	32	1
	11509	−23	−25	28	24	1
	11509	−21	−21	24	461	1
	11508	−23	+24	38	170	2
	11508	−21	+26	38	145	1
	11508	−20	+23	36	436	6
	11508	−19	+25	37	16	1
	11508	−17	+25	36	24	1
	11508	−17	+23	35	73	2
	11508	−15	+22	33	73	3
	11508	−13	+21	31	97	3
	11515	−23	+18	34	61	1
	11515	−21	+18	33	97	2
	11515	−17	+17	31	36	1
	11515	−15	+16	26	48	6
	11511	−21	+21	34	291	1
	11518	− 5	+24	33	16	1
	11518	− 4	+24	33	16	4
	11514	+ 5	+17	25	16	1
	11514	+ 5	+18	26	61	2
	11501	+72	+35	80	291	1
	(11)	(182)	(−7)		3194	49
16.610	11522	−78	+29	85	12	2
M−4	11520	−53	+21	59	61	4
	11520	−50	+18	56	12	1
	11520	−47	+18	54	16	4
	11521	−47	+30	59	24	5
	11521	−44	+29	56	12	2
	11516	−43	−18	44	12	2
	11516	−42	−19	43	48	5
	11516	−41	−17	42	6	4
	11516	−41	−19	42	16	3
	11516	−40	−17	41	16	4
	11516	−39	−19	41	121	3
	11516	−37	−21	39	6	2
	11516	−37	−19	38	12	2
	11517	−38	+25	50	61	1
	11519	−37	−24	40	6	2
	11508	−12	+22	31	12	3
	11508	−11	+21	29	6	1
	11508	−10	+24	34	48	8
	11508	−10	+22	31	6	1
	11508	− 8	+24	34	16	4
	11508	− 7	+23	32	145	13
	11508	− 7	+25	34	73	1
	11508	− 6	+22	29	121	6
	11508	− 6	+23	31	121	2
	11508	− 6	+26	34	6	3
	11508	− 5	+24	33	6	1
	11508	− 4	+22	29	6	1

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U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
	11508	− 3	+22	29	6	2
	11508	− 2	+20	27	6	2
	11508	− 1	+21	27	16	7
	11508	0	+20	26	48	3
	11515	−10	+19	28	6	3
	11515	−10	+17	26	16	4
	11515	− 8	+17	26	16	6
	11515	− 7	+17	26	6	2
	11515	− 4	+16	25	12	6
	11515	− 3	+16	24	12	3
	11515	− 2	+16	24	12	4
	11509	− 9	−21	16	412	3
	11511	− 8	+21	29	170	1
	11518	+ 6	+24	32	16	4
	11518	+ 9	+23	32	6	1
	11514	+15	+18	30	16	5
	11514	+16	+17	30	12	1
	11514	+17	+17	31	12	4
	(12)	(170)	(−7)		1807	151
17.634	11520	−40	+19	47	73	1
N−2	11520	−36	+16	44	48	2
	11520	−35	+17	43	24	2
	11520	−34	+17	42	16	1
	11516	−29	−19	32	48	1
	11516	−28	−20	31	48	2
	11516	−28	−18	30	16	1
	11516	−26	−20	29	194	2
	11517	−26	+24	40	73	2
	11508	+ 1	+22	28	16	2
	11508	+ 2	+24	32	16	2
	11508	+ 4	+25	33	73	1
	11508	+ 4	+23	30	242	6
	11508	+ 5	+24	32	48	2
	11508	+ 6	+24	32	97	2
	11508	+ 8	+22	30	24	2
	11508	+10	+22	31	48	1
	11508	+12	+21	30	61	2
	11515	+ 2	+17	25	12	1
	11515	+ 4	+18	25	73	4
	11515	+ 7	+16	24	48	1
	11511	+ 3	+21	27	194	1
	11509	+ 4	−21	15	485	2
	(7)	(157)	(−7)		1977	43
18.610	11526	−71	+17	75	36	2
M−5	11525	−63	+26	69	24	1
	11522	−49	+28	59	12	2
	11522	−48	+28	58	24	4
	11522	−45	+26	54	24	2
	11524	−37	+19	46	6	3
	11520	−26	+19	37	24	2
	11520	−24	+19	36	24	1
	11520	−22	+17	33	16	4
	11520	−21	+18	33	32	1
	11520	−19	+17	31	12	5
	11516	−16	−19	21	12	2
	11516	−16	−22	22	6	4
	11516	−16	−21	21	12	1
	11516	−15	−20	20	12	2
	11516	−14	−22	20	6	1
	11516	−14	−24	23	6	2
	11516	−12	−18	16	6	1
	11516	−12	−21	17	170	1
	11516	−12	−23	19	12	4
	11516	−10	−22	18	12	2
	11516	− 9	−20	16	12	1
	11517	−12	+24	34	16	5
	11508	+13	+22	32	6	2
	11508	+15	+23	33	242	8
	11508	+15	+24	34	16	5
	11508	+16	+24	35	73	6
	11508	+17	+23	35	61	8
	11508	+18	+24	36	121	10
	11508	+19	+23	36	24	6
	11508	+19	+21	34	73	1
	11508	+19	+20	34	16	4
	11508	+23	+20	35	6	1
	11508	+24	+22	37	194	7
	11508	+25	+20	36	16	5
	11515	+13	+17	27	12	4
	11515	+16	+17	29	12	5
	11515	+17	+17	30	6	1
	11515	+21	+16	31	16	5
	11511	+15	+21	32	170	1
	11509	+15	−22	21	388	4
	11518	+43	+25	53	6	1
	11514	+43	+18	49	6	1
	11523	+59	+21	64	16	2
	(14)	(144)	(−7)		1996	140
19.675	11527	−71	+33	79	582	1
N−2	11526	−58	+18	63	97	1
	11522	−36	+30	51	24	1
	11520	−13	+20	30	24	1
	11520	−11	+20	28	61	1
	11520	− 6	+18	26	16	1
	11516	− 3	−20	14	36	2
	11516	+ 2	−20	14	194	2
	11517	+ 1	+25	34	24	1
	11508	+29	+23	42	73	2
	11508	+30	+25	44	73	1
	11508	+30	+22	42	242	4
	11508	+33	+23	44	242	3
	11508	+34	+22	45	36	2
	11508	+38	+22	47	242	2
	11508	+39	+21	47	61	1
	11511	+30	+21	41	194	1
	11509	+30	−21	33	485	1
	(9)	(130)	(−7)		2706	28
20.549	11528	−84	−30	82	73	1
N−2	11527	−61	+31	69	339	1
	11526	−46	+16	51	61	1
	11522	−26	+29	44	36	2
	11522	−21	+26	37	12	1
	11524	−15	+18	30	48	2
	11524	−13	+17	27	12	2
	11524	−12	+18	25	32	2
	11524	−11	+19	28	24	1

MARCH

U.T.	No.	Δλ	φ	ρ	A	s
		°	°	°		
	11520	0	+20	26	16	1
	11520	+ 4	+18	26	16	2
	11516	+ 7	−21	16	48	2
	11516	+12	−22	18	16	1
	11516	+13	−19	17	170	1
	11516	+14	−19	18	24	1
	11508	+39	+23	49	97	4
	11508	+41	+25	51	85	2
	11508	+43	+23	51	291	8
	11508	+44	+24	53	97	2
	11508	+45	+23	54	291	5
	11508	+50	+22	57	242	3
	11511	+41	+21	49	170	1
	11509	+42	−20	43	436	3
	(10)	(118)	(−7)		2636	49
21.605	11528	−77	−29	76	242	1
N−2	11528	−68	−30	67	121	1
	11527	−47	+32	60	364	1
	11526	−31	+17	38	73	1
	11525	−23	+26	39	12	1
	11522	−10	+27	36	73	2
	11522	− 6	+26	34	73	1
	11524	− 1	+18	25	73	1
	11524	0	+19	26	109	2
	11524	+ 1	+18	25	16	3
	11524	+ 3	+18	26	61	2
	11524	+ 4	+19	27	16	3
	11524	+ 5	+19	27	97	2
	11516	+27	−20	30	145	4
	11508	+55	+23	61	242	3
	11508	+56	+24	63	121	2
	11508	+57	+24	64	97	2
	11508	+58	+22	64	194	1
	11508	+65	+22	69	194	1
	11511	+55	+21	61	194	1
	11509	+55	−20	55	533	1
	(10)	(104)	(−7)		3050	36
22.550	11532	−80	−25	79	242	1
N−2	11532	−79	−24	78	145	1
	11531	−70	+21	74	32	1
	11528	−64	−30	64	97	1
	11528	−55	−31	56	61	2
	11530	−57	−27	59	24	1
	11530	−54	−26	55	61	1
	11527	−35	+31	50	339	1
	11526	−18	+16	30	61	1
	11522	+ 2	+27	35	48	2
	11522	+ 6	+25	33	48	2
	11524	+10	+18	27	73	3
	11524	+12	+19	29	170	4
	11524	+14	+18	29	16	2
	11524	+15	+20	31	24	2
	11524	+18	+19	33	194	5
	11520	+32	+23	44	16	1
	11516	+40	−19	42	170	2
	11508	+68	+24	73	48	1
	11508	+68	+23	71	194	2
	11508	+69	+25	74	73	1
	11508	+71	+23	76	97	1
	11508	+80	+23	83	242	1
	11511	+68	+22	72	194	1
	11509	+69	−20	67	436	1
	(13)	(92)	(−7)		3105	41
23.548	11532	−66	−25	65	145	2
N−4	11532	−65	−24	64	97	1
	11528	−50	−30	53	48	3
	11528	−46	−34	51	48	1
	11528	−43	−33	47	48	1
	11528	−43	−31	46	24	3
	11528	−41	−30	44	61	2
	11530	−45	−27	47	48	3
	11530	−44	−26	46	16	1
	11530	−43	−25	45	24	1
	11530	−41	−26	44	16	2
	11530	−40	−27	44	6	1
	11530	−39	−26	43	48	1
	11527	−23	+31	44	339	1
	11526	− 6	+16	25	48	1
	11522	+14	+28	37	24	2
	11522	+20	+26	38	24	4
	11524	+23	+19	35	97	3
	11524	+24	+20	36	145	2
	11524	+25	+19	36	61	2
	11524	+27	+18	37	24	2
	11524	+29	+21	40	24	1
	11524	+29	+19	39	12	2
	11524	+31	+19	40	16	1
	11524	+33	+19	43	291	1
	11516	+53	−18	53	97	2
	11509	+80	−20	80	436	1
	11508	+80	+23	85	97	1
	11511	+80	+21	82	145	1
	(11)	(79)	(−7)		2509	49
24.611	11536	−78	−16	78	194	3
M−5	11532	−56	−24	57	6	1
	11532	−55	−24	56	12	1
	11532	−52	−25	53	36	7
	11532	−51	−23	52	73	6
	11532	−50	−24	52	24	5
	11535	−55	+31	64	16	2
	11535	−52	+32	63	6	1
	11535	−52	+31	63	12	1
	11531	−43	+23	51	16	3
	11531	−43	+26	54	6	1
	11530	−37	−29	43	16	6
	11530	−36	−31	41	6	1
	11530	−34	−33	41	36	2
	11530	−31	−26	35	12	6
	11530	−29	−31	36	16	4
	11530	−28	−32	36	48	8
	11530	−27	−24	32	12	6
	11530	−27	−29	34	32	7
	11530	−24	−25	29	48	8
	11530	−24	−27	31	16	3
	11527	−11	+34	43	6	1
	11527	−10	+33	42	6	1

MARCH

U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
	11527	− 7	+32	40	242	2
	11527	− 7	+34	42	6	1
	11527	− 5	+34	42	6	2
	11526	+ 6	+15	24	6	2
	11526	+ 8	+16	25	16	7
	11534	+20	−25	26	12	4
	11522	+28	+26	44	6	4
	11524	+36	+17	44	48	7
	11524	+37	+18	45	73	8
	11524	+37	+19	45	12	3
	11524	+38	+17	45	24	1
	11524	+38	+16	45	12	2
	11524	+39	+17	46	36	3
	11524	+41	+16	46	16	5
	11524	+42	+18	47	16	13
	11524	+44	+18	50	12	4
	11524	+45	+17	50	24	3
	11524	+47	+18	53	206	1
	11533	+59	+21	64	16	2
	11533	+61	+21	66	36	3
	11533	+61	+22	66	12	1
	11533	+64	+22	69	6	1
	11533	+64	+23	69	73	4
	11516	+66	−21	65	61	3
	(12)	(65)	(−7)		1632	170
25.633	11538	−86	−24	85	194	1
N−1	11536	−63	−16	63	218	1
	11535	−40	+27	53	12	1
	11532	−40	−24	43	61	1
	11532	−39	−25	43	73	1
	11532	−37	−23	40	97	1
	11531	−31	+23	43	24	1
	11530	−20	−33	33	48	1
	11530	−15	−29	26	24	3
	11530	−12	−26	23	97	1
	11530	−11	−25	22	61	1
	11528	−16	−32	29	24	1
	11537	+ 2	+25	33	16	2
	11527	+ 3	+32	39	364	1
	11527	+ 5	+34	42	16	1
	11526	+22	+17	33	36	1
	11534	+33	−25	36	36	1
	11534	+34	−24	36	16	1
	11534	+36	−23	38	61	1
	11524	+52	+20	57	242	1
	11524	+58	+20	63	170	1
	11524	+62	+21	66	121	2
	11524	+63	+22	68	291	1
	11516	+80	−18	80	145	1
	(13)	(51)	(−7)		2447	28
26.603	11538	−74	−24	73	242	1
M−3	11536	−62	−18	62	36	2
	11536	−60	−18	60	16	2
	11536	−59	−18	59	12	1
	11536	−49	−16	49	133	1
	11535	−41	+29	54	24	3
	11535	−36	+27	49	16	3
	11535	−35	+27	48	48	2

U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
	11532	−27	−28	34	12	2
	11532	−26	−27	32	16	1
	11532	−26	−26	32	32	2
	11532	−25	−24	29	16	3
	11532	−24	−24	29	36	3
	11532	−24	−26	30	16	3
	11532	−22	−25	27	24	4
	11531	−16	+23	34	6	1
	11528	− 6	−28	24	12	2
	11528	− 5	−29	24	16	1
	11528	− 3	−30	24	36	3
	11530	− 4	−26	20	12	3
	11530	+ 1	−25	18	36	1
	11537	+10	+25	34	6	1
	11537	+11	+24	34	6	2
	11537	+12	+26	35	12	2
	11527	+14	+32	42	291	2
	11527	+16	+30	41	6	1
	11534	+44	−26	46	61	3
	11534	+49	−25	51	109	1
	11524	+64	+18	68	145	4
	11524	+66	+16	69	48	5
	11524	+69	+17	72	36	5
	11524	+74	+16	77	145	4
	11524	+75	+19	78	218	3
	(11)	(38)	(−7)		1880	77
27.558	11538	−62	−24	63	218	2
N−4	11536	−50	−19	50	16	2
	11536	−47	−18	47	32	2
	11536	−46	−16	46	12	1
	11536	−44	−16	44	16	2
	11536	−37	−17	38	170	2
	11535	−30	+28	45	24	3
	11535	−26	+24	41	24	2
	11535	−25	+24	40	12	1
	11535	−23	+26	40	170	1
	11532	−14	−26	24	48	3
	11532	−11	−28	24	12	1
	11532	−11	−24	21	12	2
	11532	− 9	−24	21	12	1
	11528	+ 7	−29	24	12	1
	11530	+14	−26	24	12	1
	11530	+15	−25	24	24	1
	11530	+17	−25	25	16	1
	11527	+26	+34	48	291	2
	11527	+29	+34	50	16	1
	11539	+27	+31	46	12	1
	11539	+30	+31	47	16	1
	11539	+31	+32	48	12	1
	11539	+31	+31	47	16	1
	11534	+56	−26	57	48	2
	11534	+59	−24	60	12	1
	11534	+64	−23	64	145	2
	11524	+80	+21	82	170	1
	(10)	(26)	(−7)		1580	42
28.608	11538	−48	−24	50	133	6
M−4	11536	−36	−19	37	6	1
	11536	−35	−21	36	6	3

MARCH

U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
	11536	−33	−19	34	16	5
	11536	−32	−16	33	6	1
	11536	−26	−16	27	6	1
	11536	−23	−17	25	145	3
	11535	−11	+26	35	16	7
	11535	−10	+26	35	73	8
	11535	− 8	+26	35	12	4
	11535	− 6	+27	35	121	5
	11535	− 5	+26	34	73	2
	11532	− 2	−26	20	16	2
	11532	0	−28	23	6	1
	11532	0	−26	20	24	7
	11532	+ 2	−27	21	6	3
	11532	+ 3	−28	23	6	1
	11532	+ 3	−25	19	16	11
	11531	+ 7	+23	31	6	1
	11528	+21	−32	32	6	3
	11530	+27	−26	33	6	1
	11527	+37	+35	55	12	1
	11527	+38	+33	54	218	3
	11539	+39	+30	53	32	4
	11539	+41	+31	54	48	2
	11539	+43	+30	55	97	9
	11539	+45	+30	57	36	4
	11534	+70	−27	69	6	1
	11534	+73	−25	72	24	1
	11534	+79	−24	78	170	1
	(10)	(12)	(−7)		1348	102
29.669	11542	−80	+20	82	97	1
M−2	11538	−35	−24	37	121	4
	11536	−19	−20	24	16	4
	11536	−18	−19	23	6	1
	11536	−17	−19	22	6	1
	11536	−12	−17	16	6	1
	11536	− 8	−17	14	121	4
	11535	− 2	+27	35	12	4
	11535	− 1	+27	34	6	1
	11535	+ 1	+26	34	61	4
	11535	+ 2	+27	34	12	2
	11535	+ 2	+26	34	97	8
	11535	+ 4	+26	34	16	4
	11535	+ 5	+27	35	73	2
	11535	+ 6	+26	35	73	5
	11532	+11	−27	24	16	2
	11532	+12	−29	25	16	4
	11532	+13	−28	25	16	3
	11532	+14	−26	25	24	4
	11532	+15	−27	25	32	8
	11532	+16	−24	24	36	8
	11541	+37	−22	40	12	2
	11541	+38	−21	40	16	2
	11530	+43	−26	45	6	1
	11527	+51	+37	65	24	2
	11527	+54	+34	66	291	3
	11527	+55	+36	66	73	2
	11539	+54	+31	64	267	2
	11539	+57	+33	67	145	2
	11539	+60	+30	67	170	5
	11540	+55	−19	55	24	5
	11540	+57	−16	57	24	3
	(10)	(358)	(−7)		1915	104
30.596	11542	−67	+18	71	24	1
N−3	11538	−26	−24	30	12	1
	11538	−23	−24	27	61	1
	11538	−22	−24	27	61	1
	11536	− 7	−19	15	6	1
	11536	− 6	−18	14	12	1
	11536	− 6	−17	13	6	1
	11536	− 2	−16	10	16	1
	11536	0	−16	10	12	1
	11536	+ 3	−16	10	145	2
	11535	+12	+28	37	24	1
	11535	+12	+26	36	61	3
	11535	+14	+27	37	24	2
	11535	+14	+26	36	85	2
	11535	+16	+27	38	16	1
	11535	+17	+27	38	73	3
	11535	+19	+27	40	61	2
	11543	+23	+21	35	6	1
	11543	+24	+23	38	6	2
	11532	+24	−26	30	12	2
	11532	+28	−25	33	12	1
	11532	+29	−25	34	48	2
	11532	+30	−26	35	61	2
	11541	+48	−21	50	6	1
	11541	+48	−20	49	24	1
	11541	+51	−22	52	12	1
	11527	+64	+38	74	6	1
	11527	+66	+35	75	339	2
	11539	+66	+32	74	291	2
	11539	+70	+33	78	97	1
	11539	+73	+31	79	194	1
	11540	+66	−16	66	16	1
	11540	+68	−18	67	48	2
	11540	+70	−15	69	170	4
	(10)	(346)	(−7)		2047	52
31.687	11546	−66	+21	70	48	2
N−2	11542	−53	+20	58	24	1
	11538	− 7	−23	17	121	2
	11544	+11	−13	13	12	1
	11536	+16	−16	18	16	1
	11536	+17	−16	19	73	1
	11535	+25	+27	42	24	1
	11535	+26	+26	42	61	2
	11535	+29	+26	44	145	3
	11535	+32	+27	46	61	2
	11535	+33	+26	46	16	1
	11532	+44	−24	45	16	1
	11532	+45	−25	46	61	2
	11541	+63	−21	63	24	1
	11541	+66	−22	65	61	1
	11541	+67	−20	66	16	1
	(8)	(331)	(−7)		779	23

Mean for 31 days
$A = 2307$, $r = 143.1$

NAVY-DPPO PRNC. WASH. D.C